Nursing Home and HLTCU Beds: Appendix and Bed Need Updates, 2015 Utilization Data

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August 4, 2016

Executive Summary

The Nursing Home and HLTCU Bed Need was updated using 2015 CON Annual Survey data, 2015 US Census data, and 2018 population projection data from the Michigan Department of Technology, Management & Budget. The data appears to be more complete than the 2013 Utilization data; however, four facilities did not report patient days. Patient day utilization rates by age cohort (Appendix B) were higher for three of the four categories. As a result, the overall statewide number of NH/HLTCU beds increased by more than 1,500 (39,391 to 40,938) compared with the last update using 2013 data (March 8, 2016). This represents an overall increase of 3.93%; however, the increase in beds was not constant across the state, as the change in utilization rates differentially affected each planning area. While this increase is generally encouraging, the improved data collection effort does not appear to fully account for the long-term decreasing trend in NH/HLTCU beds that was found in previous reports.

Utilization Data

Nursing home and HLTCU utilization data in 2015 were collected from the most recent CON Annual Survey. The data included 18 additional facilities from 2013, while five facilities closed over this time period. Four facilities did not submit data for 2015. They are listed, along with the number of beds and the potential patient days missing, in Table 1. Hypothetically, if the missing facilities operated at 80% occupancy (and the reported data are accurate), the statewide patient days represented in the CON Annual Survey data would be 99.22% complete.

Table 1. Facilities that did not report utilization data in 2015. Patient days (PD) are the potential number of missing days, based on the number of beds (beds * 365).

Facility ID	Name	Beds	PD
224040	Hyland Nursing Home	51	18,615
634595	Maple Manor Rehab Center of Novi	72	26,280
824050	Aberdeen Rehabilitation and Skilled Nursing	198	72,270
824515	Maple Manor Rehab Center (Wayne)	59	$21,\!535$
State Total			138,700

Appendix B: Patient day use rates by age cohort

Statewide, the number of reported patient days increased by roughly 850,000 (6.36%) from 2013 to 2015. The values used in Appendix B of the Review Standards, along with the state-wide patient day utilization and population counts in the four age cohorts (0-64, 65-74, 75-84, and 85+) for both 2013 and 2015, are found in Tables 2 and 3.

Table 2. Appendix B, 2013 data. The results are for the entire Michigan population and all facilities that reported data in 2013. PD Rate is patient days per 1,000 people.

		2013	
Age Cohort	Patient days	Population	Rate (per 1,000)
0-64	1,637,392	8,408,029	195
65 - 74	1,987,543	835,439	2,380
75 - 84	3,588,437	$443,\!520$	8,091
85+	$6,\!135,\!344$	208,634	$29,\!408$
State	13,348,716	9,895,622	

Table 3. Appendix B, 2015 data. The results are for the entire Michigan population and all facilities that reported data in 2015. PD Rate is patient days per 1,000 people.

		2015	
Age Cohort	Patient days	Population	Rate (per 1,000)
0-64	1,941,616	8,351,905	233
65 - 74	2,353,618	907,140	$2,\!595$
75 - 84	3,761,962	450,619	8,349
85+	$6,\!139,\!965$	$212,\!912$	28,839
State	14,197,161	9,922,576	

As Tables 2 and 3 show, the total number of patient days increased in all four age categories. The total state population grew slightly over this time period; the 0–64 population dropped slightly, while the population in the other three categories increased. The patient day rates used in Appendix B show higher values for the 0–64, 65–74, and 75–84 age categories. For the 85+ category, the small increase in patient days was offset by a larger increase in population, which resulted in a lower patient day utilization rate with the 2015 data.

Bed Need

The updated Appendix B values were used to calculate the bed need, using population projection data for 2018. This resulted in a statewide bed need of 40,938 (based on the 2015 utilization data). This figure represents an increase of 1,547 beds (3.93%) from calculations made using the 2013 data. The updated bed need figures can be found in Table 4.

As Table 4 shows, the increase in NH/HLTCU beds was not consistent for all planning areas. However, in general, the planning area increases were within 3–5% of the previous figures. Notably, the update resulted in a decrease in beds for two planning areas (Benzie and Osceola), which is a result in a change in the Adjustment Factor (AF), rather than changes in population or utilization rates. In these cases, the AF increased from 0.9 to 0.95 because the average daily census rose above the 100 threshold. Hence, the padding provided by the occupancy adjustment step in the methodology was diminished for these two planning areas, resulting in the small decline in beds.

In general, the efforts to gather more complete data from the NH/HLTCU facilities appear to have been successful, as the final bed need figures produced using the 2015 data are higher than those using the 2013 data. While this is an encouraging sign in terms of data completeness, the updated bed need numbers continue to point to a general decline in NH/HLTCU utilization and need for beds in Michigan.

Table 4. Nursing Home and HLTCU bed need. BN (2013) is based on utilization and population data from 2013. BN (2015) is based on utilization and population data from 2015. The planning year is 2018 for both bed need figures. The adjustment factor (AF) is that used based on the 2015 calculations. DIFF is the raw difference between the results using the 2013 and 2015 data, while DIFF(%) is the percentage difference from the 2013 figures.

Planning Area	\mathbf{AF}	BN (2013)	BN (2015)	DIFF	DIFF(%)
Alcona	0.9	81	84	3	3.70
Alger	0.9	53	55	2	3.77
Allegan	0.95	418	436	18	4.31
Alpena	0.95	148	153	5	3.38
Antrim	0.95	120	125	5	4.17
Arenac	0.9	87	90	3	3.45
Baraga	0.9	40	42	2	5.00
Barry	0.95	249	259	10	4.02
Bay	0.95	486	503	17	3.50
Benzie	0.95	109	107	-2	-1.83
Berrien	0.95	699	723	24	3.43
Branch	0.95	177	184	7	3.95
Calhoun	0.95	553	575	22	3.98
Cass	0.95	233	243	10	4.29
Charlevoix	0.95	129	134	5	3.88
Cheboygan	0.95	151	156	5	3.31
Chippewa	0.95	151	157	6	3.97
Clare	0.95	157	163	6	3.82
Clinton	0.95	307	320	13	4.23
Crawford	0.9	79	82	3	3.80
Delta	0.95	204	210	6	2.94
Dickinson	0.95	123	127	4	3.25
Eaton	0.95	471	489	18	3.82

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Planning Area	\mathbf{AF}	BN (2013)	BN (2015)	DIFF	DIFF(%)
Emmet	0.95	161	167	6	3.73
Genesee	0.95	1,692	1,757	65	3.84
Gladwin	0.95	140	145	5	3.57
Gogebic	0.9	96	99	3	3.13
Grand Traverse	0.95	402	417	15	3.73
Gratiot	0.95	178	185	7	3.93
Hillsdale	0.95	215	222	7	3.26
Houghton and Keweenaw	0.95	158	165	7	4.43
Huron	0.95	186	192	6	3.23
Ingham	0.95	868	911	43	4.95
Ionia	0.95	212	223	11	5.19
Iosco	0.95	164	168	4	2.44
Iron	0.9	94	96	2	2.13
Isabella	0.95	215	225	10	4.65
Jackson	0.95	637	662	25	3.92
Kalamazoo	0.95	962	1,001	39	4.05
Kalkaska	0.9	82	86	4	4.88
Kent	0.95	2,092	$2,\!183$	91	4.35
Lake	0.9	71	74	3	4.23
Lapeer	0.95	341	356	15	4.40
Leelanau	0.95	160	164	4	2.50
Lenawee	0.95	411	427	16	3.89
Livingston	0.95	670	703	33	4.93
Luce	0.9	35	36	1	2.86
Mackinac	0.9	61	63	2	3.28
Macomb	0.95	3,663	3,792	129	3.52
Manistee	0.95	131	136	5	3.82
Marquette	0.95	299	311	12	4.01
Mason	0.95	143	148	5	3.50
Mecosta	0.95	177	184	7	3.95
Menominee	0.95	119	124	5	4.20
Midland	0.95	376	389	13	3.46
Missaukee	0.9	72	75	3	4.17
Monroe	0.95	611	636	25	4.09
Montcalm	0.95	251	262	11	4.38
Montmorency	0.9	68	70	2	2.94
Muskegon	0.95	644	671	27	4.19
Newaygo	0.95	209	218	9	4.31
Oakland	0.95	4,748	4,934	186	3.92

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Planning Area	\mathbf{AF}	BN (2013)	BN (2015)	DIFF	$\mathrm{DIFF}(\%)$
Oceana	0.95	109	113	4	3.67
Ogemaw	0.95	120	124	4	3.33
Ontonagon	0.9	41	43	2	4.88
Osceola	0.95	110	108	-2	-1.82
Oscoda	0.9	45	46	1	2.22
Otsego	0.95	120	124	4	3.33
Ottawa	0.95	968	1,010	42	4.34
Presque Isle	0.9	100	102	2	2.00
Roscommon	0.95	156	161	5	3.21
Saginaw	0.95	872	902	30	3.44
Saint Clair	0.95	664	691	27	4.07
Saint Joseph	0.95	250	260	10	4.00
Sanilac	0.95	194	201	7	3.61
Schoolcraft	0.9	52	54	2	3.85
Shiawassee	0.95	280	291	11	3.93
Tuscola	0.95	225	234	9	4.00
Van Buren	0.95	276	289	13	4.71
Washtenaw	0.95	1,160	1,213	53	4.57
Wexford	0.95	146	152	6	4.11
South Wayne County	0.95	1,488	1,550	62	4.17
Northwest Wayne County	0.95	2,524	2,616	92	3.65
Detroit and Eastern Wayne County	0.95	$2,\!452$	2,560	108	4.40
State		39,391	40,938	1,547	3.93